

processing the fluoropolymer matrix with the resin coated thereon such that material from the resin impregnates the fluoropolymer matrix, leaving a remaining layer of resin on a surface of the fluoropolymer matrix, wherein the remaining layer of resin comprises material of the resin that has not impregnated the fluoropolymer matrix; and

laminating the resin-impregnated fluoropolymer matrix to a conductor, wherein the conductor and the remaining layer of resin are disposed on opposite sides of the resin-impregnated fluoropolymer matrix following the laminating step.

24. The method of claim 23, wherein the fluoropolymer matrix is nonfibrillated polytetrafluoroethylene.

25. The method of claim 23, wherein the particles are inorganic particles.

29. The method of claim 23, wherein the conductor is copper.

31. The method of claim 23, wherein the thermosetting resin includes a contrasting dye.

32. The method of claim 23, wherein the device is a printed circuit board.

33. (PREVIOUSLY AMENDED) The method of claim 23, wherein the device is a chip carrier.

35. (PREVIOUSLY AMENDED) The method of claim 23, wherein the thermosetting resin

includes solvent.

36. The method of claim 35, further comprising the step of heating the coated fluoropolymer matrix to remove the solvent from the thermosetting resin, prior to the laminating step.

37. (PREVIOUSLY AMENDED) The method of claim 23, further comprising the step of subjecting the fluoropolymer matrix to a plasma process, prior to the coating step.

39. (PREVIOUSLY AMENDED) The method of claim 23, wherein the thermosetting resin contains about 30-75 percent solids.

40. (PREVIOUSLY AMENDED) The method of claim 23, wherein the laminating step comprises applying heat and pressure.

41. (PREVIOUSLY AMENDED) The method of claim 40, wherein the heat is applied at 120-250° C during the laminating step.

42. (PREVIOUSLY AMENDED) The method of claim 40, wherein the pressure is applied at 100-700 PSI during the laminating step.

43. (PREVIOUSLY AMENDED) The method of claim 23, wherein the fluoropolymer matrix is impregnated with the thermosetting resin, prior to the providing step.

45. (PREVIOUSLY AMENDED) The method of claim 35, further comprising the steps of:
coating the conductor with the thermosetting resin, prior to the laminating step; and
heating the coated conductor to remove the solvent from the thermosetting resin.

46. The method of claim 25, wherein the inorganic particles are evenly distributed throughout the fluoropolymer matrix.

47. The method of claim 25, wherein the inorganic particles are spherical in shape.

48. The method of claim 47, wherein the inorganic particles have a diameter of less than about 10 microns.

49. The method of claim 23, wherein the thermosetting resin comprises inorganic particles, and wherein the inorganic particles of the thermosetting resin do not impregnate the fluoropolymer matrix during the processing step.

REMARKS

Currently pending claims 23-25, 29, 31-33, 35-37, 39-43 and 45-49 are for consideration by the Examiner, based on the amendment herein. Claim 23 is amended herein. Claims 27-28, 33, 35, 37, 39-43, and 45 have been amended prior to the present office action response. Claims 27, 30, and 50 are cancelled herein.

The Examiner objected to claim 50.